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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,613	09/04/2003	Joseph H. Johnson	2867-661	7994
27820 7590 03/15/2011 WITHROW & TERRANOVA, P.L.L.C.			EXAMINER	
100 REGENCY	FOREST DRIVE		QUINTO, KEVIN V	
SUITE 160 CARY, NC 27518			ART UNIT	PAPER NUMBER
			2826	
			MAIL DATE	DELIVERY MODE
			03/15/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Summary	10/656,613	JOHNSON ET AL.			
Office Action Summary	Examiner	Art Unit			
The MAH INC DATE of this communication con	Kevin Quinto	2826			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
 1) ⊠ Responsive to communication(s) filed on <u>03 March 2011</u>. 2a) ☐ This action is FINAL. 2b) ⊠ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 					
Disposition of Claims					
 4) Claim(s) 9-12,14,15,17-19,32,33 and 42-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 15,17-19,32,33 and 46-50 is/are allowed. 6) Claim(s) 9-12,14 and 42-45 is/are rejected. 7) Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawlng(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicativity documents have been received in PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

Application/Control Number: 10/656,613 Page 2

Art Unit: 2826

DETAILED ACTION

Response to Amendment

1. The indicated allowability of claims 9-12, 14, and 42-45 is withdrawn in view of the new rejection under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 9-12, 14, and 42-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Claim 9 recites the limitation "said subsequent k-th layer" in line 5. There is insufficient antecedent basis for this limitation in the claim.
- 5. Claim 11 recites the limitation "said single crystal Silicon semiconductor material" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.
- 6. Claim 11 recites the limitation "said subsequent i-th layer" in line 17. There is insufficient antecedent basis for this limitation in the claim.
- 7. Claim 14 recites the limitation "said single crystal Silicon semiconductor material" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.
- 8. Claim 42 recites the limitation "said subsequent k-th layer" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2826

9. Claim 44 recites the limitation "said subsequent i-th layer" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

- 10. Claims 15, 17-19, 32, 33, and 46-50 were allowed in a previous Office action.
- 11. The following is an examiner's statement of reasons for allowance: the allowable subject matter of claims 15, 17-19, 32, 33, and 46-50 was discussed in previous Office actions.
- 12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quinto whose telephone number is (571) 272-1920. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571) 272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Application/Control Number: 10/656,613 Page 4

Art Unit: 2826

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Quinto/ Examiner, Art Unit 2826

/Minh-Loan T. Tran/ Primary Examiner Art Unit 2826